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What members of the public think NHS dental services should include: qualitative study

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Ethical approval and consent to participate

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Consent for publication

Not applicable

Data availability statement

De-identified data supporting this study's findings may be made available, upon reasonable request to the corresponding author.

Competing Interest

The authors declare that they have no competing interests

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Authors' Contributions

FM and AS contributed equally to this work as co-first authors

Conceptualisation: AS, FM, ED, AC, AD, WT, AE, NJW

Design of the interviews and focus group: AS, FM, ED, AC, AD, WT, AE, NJW

Data analysis and interpretation: AS, FM, NJW

Drafting the first version of the article: AS, FM, NJW

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What members of the public think NHS dental services should include: A qualitative study Abstract

Background: The Welsh NHS dental reform programme seeks to move beyond activity-based performance measures towards prevention, needs-led care, and fuller use of the dental team's skill-mix. Prior research explored patient experiences and barriers to access, but less is known about public perspectives on what NHS dental services should look like. This study engaged the public in co-identifying priorities and recommending solutions to better align reform with patient needs.

Methods: A qualitative study was conducted using semi-structured interviews (n = 35) and one focus group (n = 9). Participants were recruited via social media, organisational mailing lists, and research networks, and purposively sampled for diversity. Data collection took place virtually between November 2023 and May 2024. Transcripts were thematically analysed using NVivo 12. To enhance rigour, 30% of transcripts were double-coded, with themes refined collaboratively.

Results: Three key themes were generated: the architecture of an ideal service, pathways to access and equity, and enabling the patient-provider partnership. Participants prioritised timely, affordable and inclusive care delivered by the right professional, supported by effective communication and education for self-management. There was broad support for utilising team's skill-mix, risk-based recall and clearer information on urgent and emergency dental services. Many participants valued digital tools, such as online booking and teledentistry; however, these findings reflect a relatively young, digitally engaged sample. Participants stressed that digital options should remain optional, with robust non-digital alternatives to ensure equity.

Conclusions: Participants emphasised the importance of timely, equitable access, inclusive services, clear communication, and support for self-management. They were open to flexible care models, including skill-mix and risk-based recall, provided these were underpinned by patient education and trust. Digital tools were positively viewed but must be complemented by non-digital pathways to avoid widening inequalities. Policymakers should integrate these perspectives into NHS dental reform to strengthen person-centred, equitable care.

Keywords

Public perspectives, health policy, dental contract reform, teledentistry, preventive care,

What members of the public think NHS dental services should include: A qualitative study Background

 The Welsh NHS dental reform programme [1] acknowledges that Units of Dental Activity (UDA) as a sole measure of contract performance are not a robust assessment method of dental disease treatment need. As UDA focuses on treatment activity alone, it does not encourage needs-led care or risk-based prevention, nor does it make the best use of the skills of the whole dental team. In 2022 Wales introduced a variation of the existing NHS contract that removed UDAs as the sole performance metric. Instead, it focuses on prioritising access to dental services for those with the greatest need, improving the delivery of evidence-based prevention, the implementation of needs-led dental recall intervals, and an increase in the use of dental team's skill-mix [1].

In line with the National Institute for Health and Care Excellence (NICE) shared decision making guideline (NG197)[2], this reform includes a commitment to person-centred care, emphasising shared decisions and coproduction of oral health care plans [3, 4]. Engaging patients in discussions about treatment and management options which align with their personal goals can potentially improve experiences of healthcare services and outcomes[5, 6]. However, moving beyond specific treatment and management decisions, it is necessary to explore patients' preferences and needs for how they access general and emergency dental services and what those services could look like.

Previous work has provided insight into public impressions and experiences of accessing and receiving dental services in Wales, including surveys [7, 8] and the collection of patient stories [9]. For example, stories collected by Public Health Wales [9] explored challenges of accessing NHS dental care, access during COVID-19 restrictions, past experiences, oral hygiene behaviour, and ways to receive information about maintaining good oral health. Whilst the results from surveys and stories are important, they focus more on previous experiences and barriers to access and less on what participants think an ideal dental service could look like.

This study addresses a gap in NHS dental service reform by actively engaging the public in co-identifying priorities and recommending solutions. Rather than focusing solely on past experiences, we adopt a forward-looking solution-based approach, consulting the public to envisage what NHS dentistry could and should look like. This aligns with the goals of the dental reform programme [1] and will ensure the reformed system reflects public needs and

 preferences. By prioritising solution generation, this study contributes to the ongoing discourse on engaging the public to co-identify priorities and recommend solutions [10, 11], ensuring patient voices shape the future of NHS dentistry in Wales.

As part of a broader qualitative study [12], which explored the public's understanding of dental services in detail, this study investigates the public perspectives of NHS dental service delivery. Specific **objectives** were to determine:

- What do members of the public think Welsh NHS dental services could look like?
- What are their priorities for dental services in Wales?

These findings will directly inform Welsh dental reform but could also guide person-centred service delivery redesign across healthcare settings.

Methods

Study Design

This study employed a qualitative design using semi-structured interviews and a focus group. The two approaches were chosen to be complementary: interviews allowed in-depth exploration of individual lived experiences, while the focus group provided a space for participants to collectively reflect, expand on emerging findings, and identify potential improvements to services. We adhered to the Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines [13] to maintain rigorous reporting standards (See Supplementary Material 1). FM (female, PhD, Research Associate) and AS (male, PhD, Research Associate) conducted the interviews. NJW (female, PhD, Reader in Improving Patient Care) facilitated the focus group. All three researchers had formal training and experience in qualitative research methods and were motivated by improving service delivery in health and care. No prior relationships were established with participants, who were informed that the researchers were academics seeking public views to inform NHS dental reform.

Setting and Participant Selection

Participants for both interviews and the focus group were adults (aged 18 and older) eligible to access NHS General Dental Services (GDS) in Wales. A purposive sampling [14] approach was used to ensure diversity across gender, age, health board area (seven across Wales),

education, employment, disability status, income, ethnicity, and NHS dental registration status (meaning a person is recognised by the dental practice as one of their NHS patients and will see them when required, including routine examinations and any necessary treatment). Participants were also asked three questions to assess digital literacy using the Digital Health Care Literacy Scale (DHLS) [15], specifically: (1) whether they could use applications or programs (e.g., Zoom) on their own without assistance; (2) whether they could independently set up a video chat using an electronic device; and (3) whether they could solve or figure out how to solve basic technical issues on their own.

Recruitment for interviews was primarily conducted through social media (including X formerly Twitter), organisational mailing lists, and a study webpage. Focus group recruitment used the same channels and was supplemented by promotion through internal and external networks, including the Health and Care Research Wales Evidence Centre Public Partnership Group. All interested individuals completed an online screening and demographic survey to facilitate purposive selection. Selected participants were contacted and asked to provide a convenient time for interview or were sent login details for the focus group; consent forms were provided and returned prior to participation. Participants for the focus group were recruited separately from those in the interviews; no individuals participated in both. There were no additional eligibility criteria beyond age and eligibility to access NHS GDS for participation in either method; however, those who expressed willingness to participate in a group setting were purposively sampled for the focus group.

The number of participants was determined by data saturation [16] and by reference to sample sizes used in other healthcare service delivery qualitative studies [17]. Data saturation means data were collected until no new significant themes arose from interviews.

Data Collection

 Before the interviews or focus group, all individuals received an information sheet outlining definitions of non-urgent, urgent, and emergency dental services to provide context for the discussion. A structured interview guide (Supplementary Material 2), developed with Public Partners to ensure clarity and accessibility, guided the discussions.

Thirty-five semi-structured interviews were conducted virtually via Microsoft Teams between November 2023 and May 2024 by AS or FM. Interviews explored a broad range of topics including access, expectations, delivery of general dental care, the dental team, emergency care, and what matters most to patients. Interviews lasted between 30–60 minutes. No repeat interviews were conducted, and transcripts were not returned to participants for checking.

One focus group was conducted in April 2024 via Zoom, with nine participants and led by NJW. The focus group lasted approximately 1.5 hours and used a dedicated topic guide (Supplementary Material 3), concentrating on participants' understanding of the 'dental team,' dental services, and their priorities for care. These focus group participants were distinct from interview participants. Interviews primarily focused on individual lived experiences, while the focus group built on those findings and explored collective ideas for service improvement. All interview and focus group sessions were audio- and video-recorded to capture verbal and non-verbal responses.

Data Analysis

Audio-recordings were transcribed verbatim by an authorised transcription service. Transcripts were analysed (by AS/FM) using thematic analysis [18] facilitated by Nvivo 12 Software [19]. The analysis involved coding the data, developing a thematic framework, charting data into the framework, and interpreting the key themes [20]. The initial coding framework was informed by the interview and focus group guides, which were designed with Public Partner input to ensure clarity and relevance to public priorities. These guides shaped the early deductive codes, which were then refined inductively based on emerging patterns in the data.

Interview and focus group data were first analysed separately. Thematic frameworks were applied to subsets of transcripts independently by FM (interviews) and AS (focus group), then cross-checked by AS and FM respectively. Frameworks were refined in discussion with NJW before being applied to the full dataset. Where themes overlapped across methods, these were synthesised in the presentation of findings.

To enhance analytical rigour and minimise bias, 30% of the data was double-coded by multiple researchers (AS, FM, and NJW) and discrepancies were resolved through discussion

[21]. The research team discussed and agreed upon the framework and findings. No formal member checking was conducted; instead, rigour was ensured through independent coding, team discussions, cross-checking of frameworks, and iterative refinement of themes.

Results

Participants

Thirty-five individuals took part in semi-structured interviews, and nine individuals participated in the focus group. No participants withdrew once scheduled. Table 1 provides a detailed overview of participant characteristics, including gender, age, health board area, ethnicity, NHS dental registration status, and self-reported digital literacy. Participants represented a wide range of demographic and socio-economic backgrounds, ensuring diversity across the sample. Self-reported digital literacy varied among participants. Of the 35 interview participants, 30 (86%) agreed or strongly agreed that they could independently use applications or programs (such as Zoom) on devices like mobile phones, computers, or tablets without assistance. Similarly, 29 (83%) reported being able to set up video calls without help, and the same proportion (83%) expressed confidence in troubleshooting basic technical issues. Among the 9 focus group participants, 8 (89%) agreed or strongly agreed that they could independently use applications or programs, set up video calls, and troubleshoot basic issues without assistance.

The interview and focus group data were analysed both separately and together. The focus group, consisting of nine participants, largely confirmed themes identified in the interviews, particularly regarding priorities for timely, affordable, and inclusive care. In addition, the focus group provided opportunities to expand on these themes, offering collective reflections on how services could be improved, particularly around communication, education for self-management, and preferences for digital tools. Where minor differences emerged, these were mostly in the emphasis participants placed on certain service elements, rather than in the overall themes themselves. This approach allowed us to synthesise findings across methods, ensuring both individual experiences and group-level insights informed the results.

Key findings

Three key themes and fourteen subthemes emerged from the datasets (see **Table 2** for summary of themes, subthemes, and service elements to illustrative quotes; detailed quotes are presented in **Supplementary Table 1**).

Themes:

1. The Architecture of an Ideal Service

Participants considered the components that would make up an ideal service. In this, participants looked at what should be included, how they are delivered and by whom.

a) Essential versus non-essential services

Participants identified core elements they believed NHS general dental services should provide. Routine check-ups and treatment of urgent dental issues (such as broken teeth or lost fillings) were widely regarded as essential. These were seen not only as a means of maintaining oral health but also as a critical part of prevention, helping to avoid more complex issues over time. In contrast, services such as cosmetic treatments and certain cleaning procedures were generally viewed as non-essential and more appropriate for private provision unless there was a specific medical justification.

b) Delivery models

Regarding delivery models, participants expressed a variety of preferences. Many were supportive of integrated care models, such as health hubs. Our operational definition of a health hub is the co-location of dental services with other primary care facilities, such as general practices, to enhance integration and accessibility within a single healthcare setting [22]. This approach was seen as convenient, particularly for individuals with multiple health conditions, and beneficial for promoting a more holistic understanding of oral health. The co-location was also perceived to help reinforce the message that oral health is a fundamental part of overall health.

However, others preferred the more traditional model of registering with a specific dental practice. This was valued for the continuity of care it provides, allowing patients to build a relationship with their dentist and feel reassured that their dental history is understood and retained over time. For some, especially those with additional needs such as autism, the consistency and familiarity of a known dental provider were particularly important.

Walk-in dental services were mentioned as a possible solution for emergency care, but participants generally felt they were less suitable for routine dental needs. Concerns were raised about the lack of continuity and long wait times, drawing comparisons to accident and emergency departments.

c) Preferences for what emergency dental services should look like

Convenience and proximity were central concerns. Most participants said they would be willing to travel up to 15 miles or about 30 minutes for emergency care. However, this expectation was closely tied to having reliable transport. For individuals without access to a car or public transportation, travel became a significant barrier. Cost implications, such as the need to pay for a taxi, were also raised, highlighting disparities in accessibility.

2. Pathways to Access and Equity

 Participants provided insight into their opinions surrounding the mechanics of accessing care and the principles that should govern access. In this, aspects such as timeliness, affordability and inclusivity were explored. Additionally, participants emphasised the need for clearer understanding and improved access to urgent and emergency dental services (EDS) and information needed to improve understanding.

a) Recall intervals for routine check-ups

When discussing recall intervals for routine check-ups, participants favoured a flexible, needs-based approach rather than a fixed schedule. Many emphasised that the ideal frequency should depend on individual oral health status, with suggested intervals ranging from quarterly to annually. Some felt it was more important to have the assurance of timely access to care when needed, rather than adhering strictly to a predetermined timeframe. Participants also mentioned feeling the need to book regular appointments for the main purpose of remaining registered at a preferred practice.

b) Better education about EDS, what constitutes a dental emergency, and where to go

Many participants felt that public knowledge about dental emergencies was limited. There was a general lack of clarity about which dental symptoms required immediate attention and where to go for help. Participants suggested that educational campaigns could help

 people distinguish between minor issues—such as mild toothache—and true emergencies, potentially reducing unnecessary demand on emergency services.

c) Greater awareness of services and clarity on how to access them

There was a strong call for clearer and more widely available information about how to access EDS. Participants expressed a need for straightforward, well-publicised pathways that outline how and where to seek care. The booking process also needed to be user-friendly and supportive, ensuring that people could quickly and confidently obtain the help they needed during a dental emergency.

d) Easy and timely access

Access was repeatedly cited as the most important priority. Participants wanted to be able to register with an NHS dental practice, get appointments without long waits, and have simple, efficient systems to book care. However, many shared frustrations about long waiting lists, inability to join NHS practice lists, and growing concerns about dentists moving to private practice, making NHS care less available.

e) Affordability

Many participants stated that the affordability of dental care was an important priority.

Participants stressed that affordability should not be a barrier to seeking care and called for steps to make NHS dental services more financially accessible.

f) Inclusive dental services

Many participants called for inclusive services that are fair and respectful of diverse needs, including ethnicity, financial hardship, disability, neurodiversity, work schedules, and rural location. They highlighted the importance of being treated equally and without judgement, and stressed the need for services tailored to underrepresented or vulnerable groups.

g) Effective care from the right person

Participants valued being seen by appropriately qualified professionals and supported teambased care models that ensure the right person provides the right treatment at the right time.

3. Enabling the Patient-Provider Partnership

Our final theme explores elements that highlight what a successful service would look like for patients. This includes good communication, education and support for self-management and the role of digital tools and teledentistry in facilitating the partnership between patients and providers.

a) Good communication

Clear, consistent, and person-centred communication from dental practices was seen as vital. Participants shared past experiences of poor communication—such as changes to charges not being clearly conveyed—and emphasised the need for transparency and multiple communication channels.

b) Better education and support for self-management

Another priority discussed by participants was better provision of education and support from dental teams to enable them to take a more proactive role in oral health self-management. Participants described a variety of routes for evidence-based education and support, including via the dental practice (e.g. flyers to raise awareness), dental team (e.g. leaflets handed out during appointments), online information hosted by NHS Wales/Welsh Government (e.g. website where information could be accessed and dental care plans downloaded), social media (e.g. Facebook, TikTok, X to raise awareness and signpost materials), and targeted outreach programmes in schools, rural areas, and underserved communities.

c) Booking appointments online

Most participants supported online booking systems, citing convenience, flexibility, and reduced administrative effort for both patients and staff. They noted that booking via a portal or app aligned well with modern digital habits. However, many also emphasised the need to retain alternative booking options, such as telephone, particularly for those with poor internet access, limited digital literacy, or additional needs—such as older adults or people living in rural areas.

d) 'Teledentistry' – virtual communication and appointments

Participants saw value in both synchronous (real-time) and asynchronous (delayed) virtual dental consultations. They felt teledentistry could help triage urgent cases, provide early advice, and reduce unnecessary travel—especially for those in remote areas. Asynchronous approaches, like online forms or email, were seen as convenient and comparable to systems used in general medical practices.

However, participants highlighted clear limitations. They stressed that 'teledentistry' [22] may not be suitable for all cases, particularly those involving pain, complex symptoms, or situations requiring direct physical examination. Concerns were also raised about technology reliability and the potential to miss subtle clinical cues in a virtual setting. Some participants questioned whether remote consultations could truly replicate the hands-on nature of dental care.

Discussion

Principal Findings

We describe the public's key priorities for NHS dental services to inform person-centred dental reform in Wales, including timely, affordable, inclusive care from the right person, underpinned by good communication and better education and support for self-management.

Significantly, participants prioritised timely access to appropriate dental professionals with the right skills over seeing a dentist for all services, and they were receptive to skill-mix and risk-based recalls, which is a key part of reform plans in Wales [23] and other UK nations[24, 25]. Public awareness of what constitutes a dental emergency remains poor. To improve appropriate service utilisation, the public require greater clarity on what urgent and emergency services are available, when to seek this care, and how to access it. Overall, people were receptive to and expressed a preference for a range of delivery models, including digital dental services. Digital opportunities were considered beneficial by many participants, but they note these services should be optional, only used when appropriate with clear escalation procedures, and the technological infrastructure should be improved so that digital services are accessible and support inclusive dentistry.

What the public expects to be part of essential general dental services

When describing what they thought should be delivered as part of the general dental services, participants' expectations were largely in line with current service delivery and provision. Essential services included routine check-ups and treatment of urgent issues, whereas cosmetic treatments were not essential; importantly, no key gaps in services were identified. However, participants reported that the distinction between essential and non-essential NHS dental services was not clear, particularly regarding treatment coverage. This meant that whilst participants were generally content with the services available, there was an element of confusion regarding what they would be entitled to receive under the NHS. NHS dental charges, coverage, and exemptions are published on the Welsh Government website [26]. However, clearer communication regarding which treatments are considered essential (such as dentures, fillings, and extractions) and which are not (like cosmetic procedures) – like the distinctions outlined on the NHS England website [27] – would be beneficial. Clarifying these distinctions through policy updates and patient education could improve service utilisation and public trust.

Participants were receptive to and expressed a preference for a range of delivery models, highlighting the need for more flexible approaches. This could include mobile clinics and outreach programmes, improving access for underserved populations. Community-based services have been shown to enhance access for marginalised groups [28], but sustainability depends on sufficient funding and workforce support [29].

Implementation of needs-led dental recall intervals is a key goal of the dental reform programme in Wales[23], and the rest of the UK[24, 25]. Despite being recommended in NICE Guidelines 20 years ago[30], renewed in 2020 [31] and trials showing no difference in oral health outcomes between fixed and risk-based recall intervals[32], evidence suggests that many patients still attend at 6-9 months intervals[33] and some have concerns about recalls over 12 months. Implementation also remains inconsistent due to NHS contract incentives and practical barriers [34, 35].

Our participants reported mixed views on recall intervals; some preferred annual visits, others supported personalised schedules based on risk profiles. However, many participants who preferred > 12 months recall intervals also noted that there was no specific reason for

this, other than 'that is what they've always done'. Several participants, including some who preferred a 6-12 months recall interval, stated that the interval should ultimately depend on individual circumstances and tailored to the patient. Reported benefits included freeing-up capacity in NHS services for those who need access, who either do not currently attend (e.g. people from underserved communities) or cannot attend (e.g. unable to register with an NHS dentist). These findings show that participants were receptive to a risk-based recall interval that works best for them, decided together with the dental team.

Improving understanding of where, when, and how to access emergency dental services

Findings from this study indicate limited public awareness regarding what constitutes a dental emergency and where to seek appropriate care. This lack of clarity often results in the misuse of emergency services, increasing strain on healthcare resources [36, 37]. Clearer public education campaigns and accessible guidelines could address this issue [37]. Participants strongly supported a streamlined and accessible emergency dental service, aligning with research showing that timely interventions reduce complications [38]. Well-integrated urgent care pathways can improve patient outcomes while alleviating pressure on hospital emergency departments [39]. However, inconsistent service availability remains a significant barrier [40]. Improving public knowledge through digital platforms, community signage, and better integration across primary care disciplines may help address these challenges.

Equitable and appropriate use of digital technology

Participants favoured online booking systems for convenience and efficiency, reflecting research that shows digital booking reduces administrative burdens and enhances patient satisfaction [41]. However, barriers such as digital literacy and socioeconomic disparities may limit adoption [42, 43]. Ensuring equitable access to digital services is essential.

Teledentistry was also recognised by participants as beneficial, particularly for triaging and initial consultations, but they raised concerns regarding its effectiveness for diagnosis and treatment planning. Systematic reviews suggest it is useful for referrals and treatment compliance [44], with comparable diagnostic accuracy to traditional examinations for caries detection [45]. While teledentistry improves access to speciality care, particularly for rural populations [46], its success depends on technological infrastructure and patient

acceptance [47-49]. Overall, participants were positive to the use of digital technology and teledentistry but described the following conditions if this mode of delivery is used: a) it should be *inclusive* b) there is a *choice* to use the digital services, and c) there should be clear parameters regarding when they were appropriate, and *clear pathways to escalation* if a face-to-face appointment was required.

When considering these findings, it is important to take into consideration both the nature of the research methods undertaken and the participant population. As recruitment of participants was online, it naturally attracted more digitally engaged individuals (as can be seen in the digital literacy findings). While participants acknowledged that the use of online tools in dentistry would need to be utilised under specific conditions, it is important to recognise that these findings cannot be generalised to the entire population.

What Matters Most to the Public? Key Priorities for NHS Dental Services in Wales

Easy and timely access to NHS dental services and effective care from the right person were two key public priorities for NHS dental services. Long wait times discourage preventive care and worsen oral health outcomes [50]. Although NICE guideline [51] and INTERVAL Trial [32] promotes a variable risk-based recall period, INTERVAL Trial [32] highlights that patients value more frequent visits, which may explain why some choose to seek private care [52]. Addressing these challenges requires a multi-faceted approach, which could include improved appointment scheduling and increased capacity in the system via effective use of skill-mix and improved implementation of risk-based dental recall. Our findings show that the public are largely receptive to both. Specifically, many felt it was less important 'who' they saw; what mattered was seeing the right person for the issue. However, in line with our other research on what the public understand about dental teams, improved communication is essential so that the public understand who the dental team are and the reasons underpinning their personalised recall interval [12, 53].

Ensuring affordable and inclusive services were two further key priorities. Participants reflected particularly on neurodivergent individuals and those facing financial hardship. Neurodivergent patients, such as those with autism, encounter barriers due to sensory sensitivities and a lack of specialist care [54]. Socioeconomic disparities also contribute to poor oral health outcomes, with disadvantaged children disproportionately requiring

hospital admissions for severe decay [55]. Specialised or adapted services, financial support mechanisms, and targeted policy interventions are needed to ensure equitable access.

Participants also emphasised the importance of clear and transparent communication between patients and dental teams, which underpins effective person-centred care[31]. Effective communication improves patient satisfaction, reduces anxiety, and enhances adherence to treatment plans [56]. Strategies such as simple language, appropriate nonverbal cues, and active patient engagement foster trust and compliance [57].

A need for improved education and support for oral health self-management emerged as a final priority. School-based initiatives, social media campaigns, and community outreach programs have been shown to improve oral health behaviours [58]. Digital media interventions enhance oral health literacy across diverse populations [59, 60]. Expanding these efforts could support better self-management and long-term oral health outcomes.

The Misconception of Registration

Throughout this study, it was clear that there is a lack of public understanding surrounding the concept of registration to dental practises. This is a model used in primary medical care where a patient is linked to one specific practice for all of their care. This does not exist in dentistry, where registration is not feasible because the contract is linked to a private business, which negotiates with Health Boards over the number of patients and activity it is able to offer to the NHS. Consequently, the relationship with the practice and patients is for the duration of that course of treatment. This is a complex scenario for patients who wish to maintain a regular attendance with practices, but when access is dependent on the size of NHS contract that each individual practice can accommodate, which can vary on an annual basis.

This gap in public knowledge can be seen to be a primary driver of public dissatisfaction and could, in turn, prove to be a barrier to the successful implementation of reforms, as patients may fear that lengthening recall intervals may result in a loss of registration.

Tension Between Continuity and Skill Mix

The results of this study presented two potentially conflicting opinions. It was seen that participants valued continuity in their care. A key reason for this being the assurance that

dental history is understood and retained over time. On the other hand, participants were broadly receptive to the idea of skill-mixing, with many focussed on ensuring they see the appropriate person for the treatment required.

Generally, ideals surrounding continuity of care centred around the insurance of quality of care, rather than the desire to see a specific individual. As such, it could be that this priority may shift with an increase in education about the different roles and by increasing public trust in the quality dental services overall.

There were a few participants that mentioned that being treated by the same professional at each visit may make dental services more accessible to those with additional needs, however, the extent of this was not explored within this study.

Strengths and Weaknesses of the Study

This study's qualitative approach is a key strength, which enables an in-depth exploration of public expectations beyond previous surveys and patient experience reports. Semi-structured interviews provided flexibility while maintaining focus on key topics. Involving a public partner throughout the research process, from conceptualisation to reporting, further enhanced its relevance. Participants were acutely aware and mindful of the widely documented pressures on NHS dentistry, including access issues. Whilst they frequently used personal experiences to illuminate their points, including those related to access, we also found that the participants were largely solution-focused - reflecting on what their needs were but also making recommendations for how those might be feasibly met in NHS dentistry. While the sample's diversity supports the transferability of findings to other dental care settings, further research is needed to confirm this across different contexts. However, the self-selecting nature of participants, particularly due to digital data collection methods and the predominance of younger respondents, may introduce bias—for example, the preference for online booking observed in this study. Lastly, as dental policies evolve, patients' concerns and priorities may shift over time.

Implications for Policy and Practice

These findings can be used to guide dental reform programmes so that they align with the needs and preferences of the public. Specifically, public education campaigns are needed to clarify service availability, emergency and urgent care pathways, eligibility for NHS-funded

 treatments and self-management of oral health. These could in turn help to support use of skill-mix and risk-based dental recall. Dental reform should integrate digital tools to improve appointment accessibility, and consider alternative care models, such as outreach programmes, when appropriate. A person-centred and inclusive approach with enhanced communication strategies, may improve trust and engagement with NHS dental services and improved self-management.

Further Research

Future research should explore effective strategies for improving public awareness of available NHS dental services, how they are operated and explore the potential of digital innovations and targeted community outreach to support inclusive dental services.

Additionally, studies examining the long-term impact of alternative care models, such as mobile clinics and teledentistry, could inform sustainable service expansion. As previously mentioned, this research presented is more representative of the views of those who are younger and more digitally literate. It would therefore be beneficial to specifically explore the experiences and views of older and less digitally literate populations.

The importance of continuity for those with additional social needs was also mentioned, but not explored to the extent of being able to provide specific recommendations for this population. Therefore, further research into the improving accessibility for those with additional social needs would assist in future changes to dental services to make a more inclusive service for all. Moreover, investigating patient experiences with risk-based recall intervals may further refine best practices in preventive care.

Conclusions

Public priorities for NHS dental services include easy and timely access to affordable and inclusive care from an appropriate dental team member, supported by good communication, education, and self-management resources. Addressing these priorities requires improving awareness of urgent and emergency care pathways, promoting flexible and alternative delivery models, integrating digital solutions, embedding effective communication and self-management support, and enhancing inclusivity. Given that our participants were generally younger and more digitally literate, their strong support for online booking and tele-dentistry should be interpreted with caution. Maintaining robust non-digital options (e.g., telephone and in-person access) is essential to ensure that digital

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innovations enhance equity rather than widen disparities. Through policy reforms and targeted education initiatives, services can better align with public needs, improving patient experiences and health outcomes.

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Table 1. Participant characteristics (interviews, n = 35; focus group, n = 9)

Characteristic	Interviews	Focus group
	n (%)	n (%)
Gender		
Female	16 (46)	1 (11)
Male	19 (54)	6 (67)
Non-binary	0 (0)	2 (22)
Age Group (years)		
18–24	4(11)	0 (0)
25–34	14 (40)	4 (44)
35–44	3 (9)	1 (11)
45–54	7 (20)	0 (0)
55–64	3 (9)	1 (11)
65–74	2 (6)	3 (33)
75–84	2 (6)	0 (0)
Ethnicity		
White	20 (57)	6 (67)
Black, African, Caribbean, or Black British	11(31)	1 (11)
Mixed or multiple ethnic groups	3 (9)	1 (11)
Asian or Asian British	1 (3)	0 (0)
Prefer not to say	0 (0)	1 (11)
NHS Dental Registration Status		
Registered with an NHS dentist	27 (77)	7 (78)
Not registered	5 (14)	2 (22)
Unsure	3 (9)	0 (0)
Health Board Area		
Aneurin Bevan University Health Board	5 (14)	2 (22)
Betsi Cadwaladr University Health Board	5 (14)	0 (0)
Cardiff & Vale University Health Board	10 (29)	3 (33)
Cwm Taf Morgannwg University Health Board	2 (6)	0 (0)
Hywel Dda University Health Board	2 (6)	0 (0)

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Powys University Health Board	3 (9)	0 (0)
Swansea Bay University Health Board	6 (17)	4 (44)
Don't know	2 (6)	0 (0)
Digital Health Care Literacy Scale (DHLS)		
Can use applications independently	30 (86)	8 (89)
Can set up video chat independently	29 (83)	8 (89)
Can solve basic technical issues	29 (83)	8 (89)

Table 2: Summary of Thematic Findings

Theme	Subtheme	Summary of Key Findings	Illustrative Quote
1. The Architecture of an Ideal Service	a) Essential vs. Non- essential Services	Participants saw routine check-ups and urgent treatment as essential. Cosmetic and non-urgent treatments were less essential.	"Regular check-ups are essential prevention comes first." (P6)
	b) Delivery Models	Health hubs were viewed as convenient and holistic. Others preferred registered practices for continuity. Walk-ins were seen as useful only for emergencies.	"speaking as a diabetic I have to go one place for eye screening, one place for foot screening, one place for my consultant, one place for my GPif they could be colocated it's a bit easier" (P6)
	c) Preferences for what emergency dental services should look like	Participants wanted short travel distances and timely access. Lack of transport was a concern.	"not to travel so long in the case of an emergency. Because it's called emergency, anything can happen." (P13)
2. Pathways to Access and Equity	a) Recall Intervals for routine check-ups	Preferred recall intervals varied; many suggested 6–12 months, with flexibility based on individual need.	".I would probably think in terms of kind of the routine appointments, I think six monthly to a year seems fine." (P4)
	b) Better education about EDS, what constitutes a dental emergency, and where to go	Participants wanted clearer public messaging about what counts as a dental emergency and where to go.	"We need a bit of a campaign to say this is what you do with a dental emergency. But also, what is an emergency? So, if I've got toothache, that can probably wait until tomorrow." (P74)
	c) Greater awareness of services and clarity on how to access them	Systems for accessing EDS should be clearer, with well-signposted, accessible routes.	"we should create awareness whereby people are learning about the emergency dental services." (P35)
	d) Easy & Timely Access	Participants prioritized timely, equitable access to NHS dentists.	"You could be on a huge waiting list" (P6) "The crucial bit when I say accessible it's to be able to get an appointment on a fairly timely basis" (P24)
	e) Affordability	Affordability was a barrier; many stressed the need for lower-cost or free care.	"we have to work towards making dental care more affordable." (P27)
	f) Inclusive dental services	Importance of non- discriminatory, culturally	"my expectation is to be treated the same" (P49)

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	T		
		and socially inclusive services.	"You see posts online going 'does anyone know of any dentists that are sympathetic and good with like autistic children" (P45)
	g) Effective care from the right person	Importance of being treated by appropriately skilled professionals.	"as long as they're qualified for what needs doing" (P3) "Being able to access the right person,for the treatment that you want." (P45)
3. Enabling the Patient-Provider Partnership	a) Good Communication	Emphasis on clear, transparent, person- centred communication from dental teams.	"kept in the loop about basic things" (P45)
	b) Better education and support for self- management	Participants valued education on oral health and support for selfmanagement.	""Education on proper oral hygiene and the role and importance of a healthy lifestyle, not just for dental wellbeing,it should be a place of education." (P27)
	c) Booking appointments online	Preferred for convenience, though non-digital options should remain for inclusivity.	"it can't be all online yet because we're just not quite there." (P6) "booking it online and selecting a time and then getting a confirmation email would be the way to go" (P24)
	d) 'Teledentistry' – virtual communication and appointments	Seen as helpful for triage and rural access; concerns included diagnosis limitations and tech reliability.	"connection might be an issue sometimes." (P28) "I think if the case is not severe, then it is fine. If it is severe, they will have to see you physically" (P37)